(19) World Intellectual Property Organization International Bureau





(43) International Publication Date 26 February 2004 (26.02.2004)

PCT

(10) International Publication Number WO 2004/016588 A1

- (51) International Patent Classification⁷: C07D 207/36, 207/44, 307/58, C08F 224/00, A61K 31/4015, 31/341, 7/16, A61P 31/00, 33/00, 17/10, A01N 43/08, 43/36, A61L 12/14, B08B 17/02
- (21) International Application Number:

PCT/AU2003/001053

- (22) International Filing Date: 19 August 2003 (19.08.2003)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 2002950862

19 August 2002 (19.08.2002) AU

- (71) Applicant (for all designated States except US): BIOSIG-NAL PTY LTD [AU/AU]; Rupert Myers Building, Gate 14, Barker Street, UNSW, Sydney, New South Wales 2052 (AU).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): KUMAR, Naresh [AU/AU]; 33 White Avenue, Maroubra, New South Wales 2035 (AU).

- (74) Agent: F.B. RICE & CO.; 139-141 Rathdowne Street, Carlton, Victoria 3053 (AU).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PII, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GII, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: FURANONE DERIVATIVES AND METHODS OF MAKING SAME

(57) Abstract: Novel synthesis methods, to the products of such novel methods, and to uses of these products. In particular, the present invention provides methods for the reactions of furanones, in particular fimbrolides, with amines. The invention has particular application in the synthesis of halogenated 1,5-dihydro-pyrrol-2-one, 5-halomethylene substituted 1,5-dihydropyrrol-2-ones (lactam analogues of fimbrolides), 5-amino substituted furanones and 5-aminomethylene-2(5H)-furanones and their synthetic analogues. The invention also relates to novel compounds and uses thereof.

